

## TIPS FOR PRESENTING SURVEY DATA EFFECTIVELY

### I. Convert Data to Percentages:

Hypothetical Situation: Let's say you gave a questionnaire to freshmen and seniors asking about revision and you received the following responses to the question "I make revisions to the content of my papers"

Freshmen: 9 Always 11 Sometimes 14 Rarely  
Seniors: 8 Always 4 Sometimes 0 Rarely

You could put these raw numbers in a table, but it would not be particularly meaningful since you have unequal numbers of freshmen and seniors. To enable your reader to make meaningful comparisons, convert these numbers to percentages and place them in a table or chart.

**Table 1: Student responses to statement "I make revisions to content of my papers"**

<i>Level</i>	<i>Always</i>	<i>Sometimes</i>	<i>Rarely</i>
Freshmen ( <i>n</i> =34)	27%	32%	41%
Seniors ( <i>n</i> =12)	67%	33%	0%

Converting to percentages allows the reader to make comparisons between the two groups while reporting the total number in each group (the "n" in the first column) tells readers how much credence to place on the percentages.

### II. Convert Likert-scale data to numeric values:

Hypothetical Situation: Let's say you gave a questionnaire to students in three different majors asking their satisfaction with the course offerings in their majors and you receive the following responses.

Question: I am satisfied with the variety and scheduling of courses in my major

Biology: 1 Strongly Agree 2 Agree 10 Disagree 2 Strongly Disagree  
English: 4 Strongly Agree 10 Agree 3 Disagree 0 Strongly Disagree  
Business: 9 Strongly Agree 8 Agree 0 Disagree 0 Strongly Disagree

Even if you convert this data to percentages, it will be a lot for readers to take in. Instead, we can assign values to each response to report a single average response for each major.

Strongly Agree = 4 points  
Agree = 3 points  
Disagree = 2 points  
Strongly Disagree = 1 point

So, for Biology majors, we'd have

1 strongly agree	*	4 points = 4
2 agree	*	3 points = 6
10 disagree	*	2 points = 20
2 strongly disagree	*	1 point = 2
		=====
		32 points

Since 15 Biology majors answered the questionnaire, we'd take  $32/15 = 2.1$  average for this major

**Table 2: Average agreement with the statement “I am satisfied with the variety and scheduling of courses in my major” (1 = strongly disagree; 4 = strongly agree)**

<i>Major</i>	<i>Satisfaction</i>
Biology ( $n=15$ )	2.1
English ( $n=17$ )	3.1
Business ( $n=17$ )	3.5

Converting the data to a single number makes it easy to draw comparisons and contrasts across the different groups. At the same time, the total number of respondents in each group is reported, letting us know how reliable the data is.

### III. Provide a brief narrative description of your data.

The rule of thumb is that both your table or figure and the accompanying text should (a) be able to be understood independent of one another and (b) reinforce one another. To reinforce the data, your narrative description should do the following:

1. Refer directly to the table or figure by number.
2. Begin by stating the major trend in the data as factually by possible.
3. Describe points of interest in the data (such as the high and low points) and the results of statistical tests if they have been performed.
4. Describe any additional trends.
5. Concede or explain any aberrant data that does not support the main trends.
6. End by referring to the implications of the trend.

#### Example Narrative Description of Data:

Table 2 shows that Biology students reported much lower satisfaction with the course offerings in their major than either English or Business majors. These students tended to disagree that they were satisfied with the variety and scheduling of courses in their majors (averaging score 2.1 on a 4 point scale assessing enjoyment) while English and Business majors averaged 3.1 and 3.5, respectively. This data suggests that the Biology department has less satisfied students than other departments.